

Docket No. AUS920011010US1

CLAIMS:

What is claimed is:

1. A method for securing cellular telephone
5 transmissions utilizing a conventional cellular telephone, said method comprising the steps of:
 providing a conventional cellular telephone, said conventional cellular telephone being incapable of independently encrypting or decrypting signals;
10 providing a computer system coupled between an external microphone and said cellular telephone, wherein inputs into said cellular telephone are received first by said computer system, said computer system being separate and apart from said cellular telephone;
15 receiving, within said computer system, an input signal from said external microphone;
 encrypting, within said computer system, said input signal utilizing public key encryption;
 passing said encrypted input signal from said
20 computer system to said cellular telephone; and
 transmitting said encrypted input signal utilizing said cellular telephone, wherein cellular telephone transmissions from said cellular telephone are secured.
- 25 2. The method according to claim 1, further comprising the step of encrypting, within said computer system, said input signal utilizing a key pair, said key pair including a public key and a private key.
- 30 3. The method according to claim 2, further comprising the step of encrypting, within said computer system, said input signal utilizing said public key.

Docket No. AUS920011010US1

4. The method according to claim 1, further comprising the steps of:

receiving, within a Java application executing within said computer system, said input signal from said external microphone;

encrypting, utilizing said Java application, said input signal utilizing public key encryption; and

passing said encrypted input signal from said Java application to said cellular telephone.

10

5. The method according to claim 1, further comprising the step of passing said encrypted signal from said computer system to a microphone port included in said cellular telephone.

15

6. The method according to claim 1, further comprising the steps of:

providing a second conventional cellular telephone, said second conventional cellular telephone being incapable of independently encrypting or decrypting signals;

providing a second computer system coupled between an external speaker and said second cellular telephone, wherein outputs from said second cellular telephone are received first by said second computer system before being output to said speaker, said second computer system being separate and apart from said second cellular telephone;

receiving, within said second computer system, an encrypted output from a speaker port included within said second cellular telephone;

30

Docket No. AUS920011010US1

decrypting, within said second computer system, said encrypted output utilizing public key encryption; and outputting said decrypted output from said second computer system to said external speaker.

5

7. The method according to claim 6, further comprising the step of encrypting, within said computer system, said input signal utilizing a key pair, said key pair including a public key and a private key.

10

8. The method according to claim 7, further comprising the step of encrypting, within said computer system, said input signal utilizing said public key.

15

9. The method according to claim 8, further comprising the steps of:

obtaining, by said second computer system, said private key of said computer system; and

20

decrypting said encrypted input signal utilizing said private key.

25

10. The method according to claim 9, further comprising the step of exchanging said private key between said computer system and said second computer system prior to transmissions of cellular telephone signals.

11. A system for securing cellular telephone transmissions utilizing a conventional cellular telephone, comprising:

30

a conventional cellular telephone, said conventional cellular telephone being incapable of independently encrypting or decrypting signals;

Docket No. AUS920011010US1

computer system coupled between an external microphone and said cellular telephone, wherein inputs into said cellular telephone are received first by said computer system, said computer system being separate and
5 apart from said cellular telephone;

said computer system for receiving an input signal from said microphone;

said computer system for encrypting said input signal utilizing public key encryption;

10 said computer system for passing said encrypted input signal from said computer system to said cellular telephone; and

said cellular telephone for transmitting said encrypted input signal, wherein cellular telephone
15 transmissions from said cellular telephone are secured.

12. The system according to claim 11, further comprising said computer system for encrypting said input signal utilizing a key pair, said key pair including a public
20 key and a private key.

13. The system according to claim 12, further comprising said computer system for encrypting said input signal utilizing said public key.
25

14. The system according to claim 11, further comprising:

Java application executing within said computer system for receiving said input signal from said
30 microphone;

said Java application for encrypting said input signal utilizing public key encryption;

Docket No. AUS920011010US1

said Java application for passing said encrypted input signal from said Java application to said cellular telephone.

- 5 15. The system according to claim 11, further comprising said computer system for passing said encrypted signal from said computer system to a microphone port included in said cellular telephone.

- 10 16. The system according to claim 11, further comprising:

a second conventional cellular telephone, said second conventional cellular telephone being incapable of independently encrypting or decrypting signals;

- 15 a second computer system coupled between an external speaker and said second cellular telephone, wherein outputs from said second cellular telephone are received first by said second computer system before being output to said speaker, said second computer system being
20 separate and apart from said second cellular telephone;

said second computer system for receiving an encrypted output from a speaker port included within said second cellular telephone;

- said second computer system for decrypting said
25 encrypted output utilizing public key encryption; and

said second computer system for outputting said decrypted output from said second computer system to said speaker.

- 30 17. The system according to claim 16, further comprising said computer system for encrypting said input signal

Docket No. AUS920011010US1

utilizing a key pair, said key pair including a public key and a private key.

18. The system according to claim 17, further comprising
5 said computer system for encrypting said input signal utilizing said public key.

19. The system according to claim 18, further comprising:
10 said second computer system for obtaining said private key of said computer system; and
 said second computer system for decrypting said encrypted input signal utilizing said private key.

20. The system according to claim 19, further comprising
15 said computer system for exchanging said private key between said computer system and said second computer system prior to transmissions of cellular telephone signals.

21. A computer program product executing within a data
20 processing system for securing cellular telephone transmissions utilizing a conventional cellular telephone, said computer program product comprising the
25 data processing system implemented steps of:

 instruction means for providing a conventional cellular telephone, said conventional cellular telephone being incapable of independently encrypting or decrypting signals;

30 instruction means for providing a computer system coupled between an external microphone and said cellular telephone, wherein inputs into said cellular telephone

Docket No. AUS920011010US1

are received first by said computer system, said computer system being separate and apart from said cellular telephone;

instruction means for receiving, within said
5 computer system, an input signal from said microphone;

instruction means for encrypting, within said computer system, said input signal utilizing public key encryption;

instruction means for passing said encrypted input
10 signal from said computer system to said cellular telephone; and

instruction means for transmitting said encrypted input signal utilizing said cellular telephone, wherein cellular telephone transmissions from said cellular
15 telephone are secured.

22. The product according to claim 21, further comprising instruction means for encrypting, within said computer system, said input signal utilizing a key pair,
20 said key pair including a public key and a private key.

23. The product according to claim 22, further comprising instruction means for encrypting, within said computer system, said input signal utilizing said public
25 key.

24. The product according to claim 21, further comprising:

instruction means for receiving, within a Java
30 application executing within said computer system, said input signal from said microphone;

Docket No. AUS920011010US1

instruction means for encrypting, utilizing said Java application, said input signal utilizing public key encryption;

5 instruction means for passing said encrypted input signal from said Java application to said cellular telephone.

25. The product according to claim 21, further comprising instruction means for passing said encrypted
10 signal from said computer system to a microphone port included in said cellular telephone.

26. The product according to claim 21, further comprising:

15 instruction means for providing a second conventional cellular telephone, said second conventional cellular telephone being incapable of independently encrypting or decrypting signals;

instruction means for providing a second computer
20 system coupled between an external speaker and said second cellular telephone, wherein outputs from said second cellular telephone are received first by said second computer system before being output to said speaker, said second computer system being separate and
25 apart from said second cellular telephone;

instruction means for receiving, within said second computer system, an encrypted output from a speaker port included within said second cellular telephone;

instruction means for decrypting, within said second
30 computer system, said encrypted output utilizing public key encryption; and

Docket No. AUS920011010US1

instruction means for outputting said decrypted output from said second computer system to said speaker.

27. The product according to claim 26, further
5 comprising instruction means for encrypting, within said computer system, said input signal utilizing a key pair, said key pair including a public key and a private key.

28. The product according to claim 27, further
10 comprising instruction means for encrypting, within said computer system, said input signal utilizing said public key.

29. The product according to claim 28, further
15 comprising:
instruction means for obtaining, by said second computer system, said private key of said computer system; and

instruction means for decrypting said encrypted
20 input signal utilizing said private key.

30. The product according to claim 29, further
comprising instruction means for exchanging said private key between said computer system and said second computer
25 system prior to transmissions of cellular telephone signals.